AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-19 (cancelled).

Claim 20 (previously presented): An accelerated petrifaction process of lignocellulose materials, comprising the step of impregnating with an aqueous solution an alkaline hydroxide and a soluble silicate, under pH conditions that permits its partial neutralization and insolublization of the salts in situ in the interior of the lignocellulose material by the action of acid groups present in the lignocellulose material and the acidic action of carbon dioxide present in the surrounding air.

Claim 21 (currently amended): The process according to claim 20, wherein the impregnation with ~~silicea~~silicate occurs in a range of pH between 9 and 13, and preferably between 11 and 12.

Claim 22 (previously presented): The process according to claim 20, wherein the impregnation is performed with wood having a humidity content between 1% and 50%, and preferably less than 30%.

Claim 23 (currently amended): The process according to claim 20, wherein the soluble silicate used is sodium silicate, in a ~~silicea~~silica solution, with a concentration between 1% and 28% ~~in~~by weight, preferably between 4% and 16% ~~in~~by weight.

Claim 24 (currently amended): The process according to claim 20, wherein the soluble silicate used is potassium silicate, in a silicon solution, with a silicon dioxide

concentration between 1% and 28% ~~in~~by weight, preferably between 4% and 16% ~~in~~by weight.

Claim 25 (previously presented): The process according to claim 20, wherein the impregnation is performed under vacuum and pressure conditions in at least one successive cycle of vacuum and pressure.

Claim 26 (previously presented): The process according to claim 20, wherein the impregnation is performed under a pressure of 1 to 20 atmospheres during a period of 10 to 300 minutes, preferably from 15 to 60 minutes.

Claim 27 (previously presented): The process according to claim 20, wherein the impregnation stage is performed by immersion at atmospheric pressure.

Claim 28 (previously presented): The process according to claim 20, wherein the impregnation stage is performed with showers or other aspersion methods.

Claim 29 (previously presented): The process according to claim 20, wherein soluble metaborate salts are added to the solution of an alkaline hydroxide and a silicate, used for impregnation.

Claim 30 (currently amended): The process according to claim ~~20~~29, wherein the metaborate is produced previously through the reaction of boric acid with a highly dissociated hydroxide and is next added to the silicate solution.

Claim 31 (currently amended): The process according to claim ~~20~~29, wherein the metaborate is produced through the reaction of soluble sodium or potassium tetraborate with a highly dissociated hydroxide and it is next added to the silicate solution.

Claim 32 (currently amended): The process according to claim 20, wherein the concentration of the impregnating solution has a content of soluble metaborate salt of

0.02% to 0.7% of boron ~~in~~by weight, preferably between 0.1% and 0.3% of boron ~~in~~by weight.

Claim 33 (currently amended): The process according to claim 20, wherein the final concentration of boron in the lignocellulose material is 0.08 and 3.20 kg/m^3, preferably 0.40 to 1.40 kg/m^3 of wood and of 4 to 126 kg/m^3 of ~~silicc~~silica, preferably between 18 and 74 kg/m^3 of ~~wood~~silica.

Claim 34 (currently amended): The process according to claim 20, wherein the insolubilization of ~~silicc~~silica and boron can be facilitated in the interior of the lignocellulose material due to a subsequent washing stage with water, with water acidulated with inorganic acids, organic acids, and/or salts or a mixture of them.

Claim 35 (currently amended): The process according to claim ~~20~~34, wherein the washing is performed with a solution that contains specified quantities of sulfuric acid, hydrochloric acid, nitric acid, boric acid, phosphoric acid, acetic acid, formic acid or a mixture of them.

Claim 36 (currently amended): The process according to claim ~~20~~34, wherein the washing is performed with a soluble ~~alkalinearth~~alkaline earth element solution.

Claim 37 (currently amended): The process according to claim ~~20~~34, wherein the washing with water or with a liquid of more acidic characteristics than those of the impregnating liquid occurs under vacuum and pressure conditions.

Claim 38 (currently amended): The process according to claim ~~20~~34, wherein the washing with water or with a liquid of more acidic characteristics than those of the impregnating liquid occurs via baths, or other methods of immersion, or showers or other methods of aspersion.

Claim 39 (currently amended): The process according to claim 36, wherein the soluble ~~alkalinearth~~alkaline earth element solution is at least one of calcium, strontium or barium, as soluble chlorides or nitrates.